Nicollet-Central Transit Alternatives

T&PW

February 12, 2013

Study Overview

- Evaluate costs, impacts and benefits of a variety of alternative transit options
- Select a locally preferred alternative for transit improvements on Nicollet-Central corridor





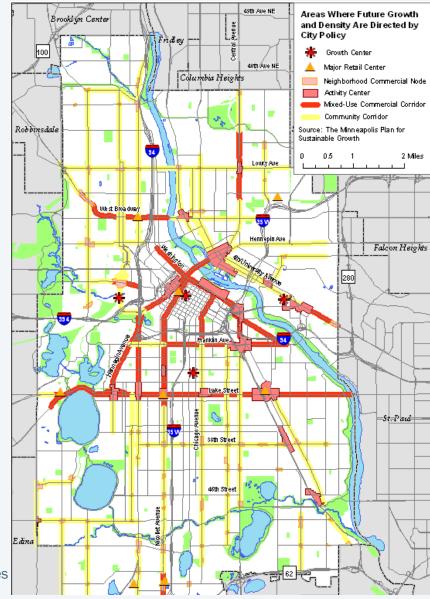
Growing Sustainably along Transit

- Region is growing
- Growth is good for the City
 - More people, more economic opportunities, more tax base
- Need a transportation system to accommodate growth
- Achieve optimum growth along transit
 - Move more people with fewer vehicles
 - Minimize congestion
 - Maximize sustainability and quality of life
- Key objective of The Minneapolis Plan for Sustainable Growth and Access Minneapolis Transportation Action Plan



Growing Sustainably along Transit

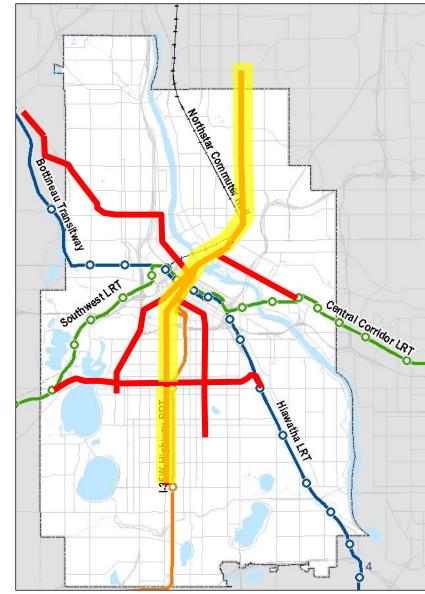
- City policy directs most intense growth to
 - downtown
 - activity centers
 - commercial corridors
- Places where
 - History of transit service
 - Transit oriented land uses and urban form
 - LRT generally too big
 - Need to consider other transit tools





Growing Sustainably along Transit

- Existing and Future Transitways
- 2007 Streetcar Feasibility Study Network
- Nicollet-Central Corridor prioritized by City Council in 2010
- Further Study Underway





Work to Date

- Phase I: Project Initiation / Purpose and Need
 - September Open Houses
- Phase II: Initial Screening of Options and Definition of Alternatives for Detailed Evaluation
 - February Open Houses



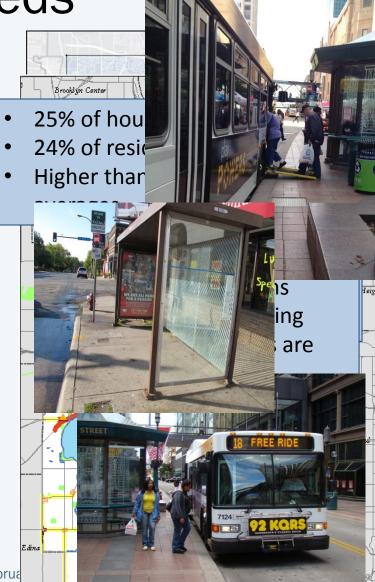
Corridor Needs

Strong and Growing Travel Demand

- Density and growth
- Diversity of trip purposes/destinations
- People who rely on transit
- Lots of short trips
- Economic Development Trends and Objectives
- Deficiencies in Existing Bus Services
 - Stopping every block
 - Paying fares at the front door
 - Reliability challenges
 - Crowding

Minimal stop amenities

Nicollet-Central Transit Alternatives | Februa



Project Purpose

(approved by Policy Advisory Committee 10/25/2012)

- The purpose is to...
 - improve transit connectivity,
 - enhance the attractiveness of transit service,
 and
 - catalyze development through an investment in transit infrastructure within the Nicollet-Central Corridor.



INITIAL SCREENING OF ALTERNATIVES



Initial Screening of Modes

Modes Considered

- conventional bus*
- enhanced bus (in mixed traffic)*
- modern streetcar*
- bus rapid transit (in a dedicated busway)
- light rail transit
- heavy rail
- maglev
- monorail
- personal rapid transit
- commuter rail

^{*}Recommended for detailed analysis



Conventional Bus



Enhanced Bus



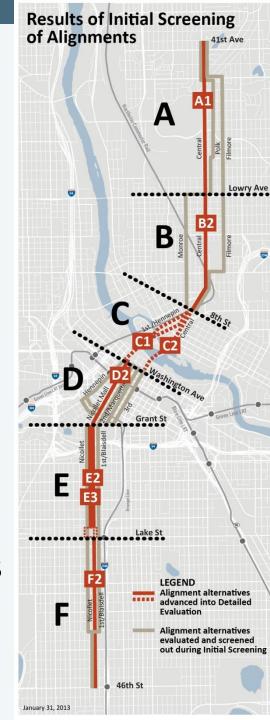
Modern Streetcar



Initial Screening of Alignments

- Variety of parallel alignments considered
- Recommended Alignment
 - Nicollet Avenue S, Nicollet Mall,
 Central Avenue NE
 - Two river crossing options (Hennepin/First vs. Third/Central)
 - Two Lake Street connection options (through Kmart, around Kmart)





Detailed Evaluation of Alternatives

Modern Streetcar



Enhanced Bus



No Build (existing local bus)







WHAT IS MODERN STREETCAR AND ENHANCED BUS?



Modern Streetcar

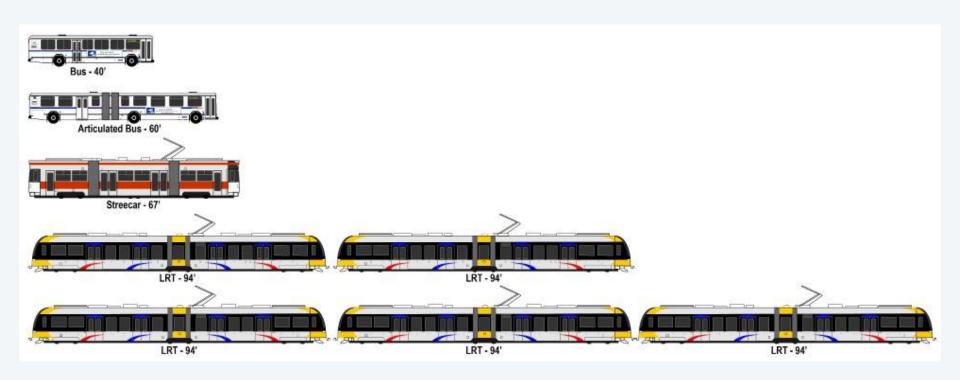
- mixed traffic lanes with cars
- single car trains (~70' long)
- ¼ to ½ mile stop spacing
- Short route distance
- Activity center circulation



Light Rail

- tracks separate from cars
- 2-3 car trains (each ~90' long)
- ½ to 1 mile stop spacing
- Long route distance
- Regional, long-haul service

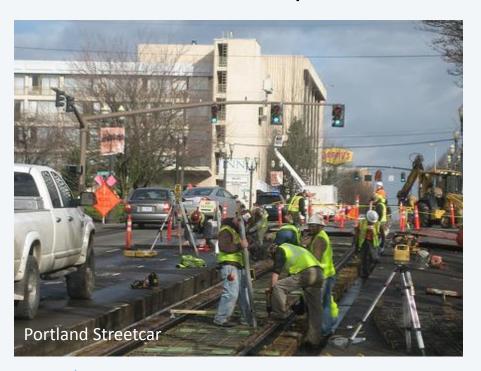






Modern Streetcar

- Less construction impacts
- \$30-60 million per mile



Light Rail

- More extensive construction
- \$80-125 million per mile





Modern Streetcar

Light Rail







Not Vintage Streetcar

Boarding in the Street



Boarding from Platform





Larger, Easily Recognizable Vehicle

Modern Streetcar







We will not select an exact vehicle during this study. Vehicle design and selection is an important step and takes time.



Fewer Stops

- Stops approximately every ¼-mile
 - Typically every other block
 - Similar stop spacing on Nicollet Mall as today
 - Becomes primary local service in corridor
- Compared with:
 - Existing local bus every block (1/8 mile)
 - LRT every ½ to 1 mile
 - I-35W Highway BRT every 2-4 miles



This study will identify the number of stops so we can estimate costs and ridership.

Exact stop locations to be identified during design.



Service Features

- Frequent, all-day service
 - Every 7.5 to 10 minutes
 - All day and evening
 - As frequent as today's bus service
- Complementary bus service
 - Enhanced bus and modern streetcar to replace local service
 - Service to downtown via limited-stop service north of 41st and south of 46th
 - No changes expected to Routes 11, 17 and 25

Preliminary concepts are presented and will undergo refinements during design.



Use Same Lanes as Cars and Trucks

(With Other buses on Nicollet Mall)

Modern Streetcar





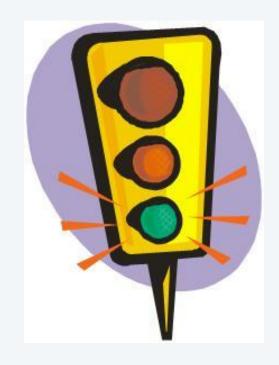
Enhanced Bus





Fewer Signal Delays

- Transit signal priority
 - A little more green time or a little earlier green time for enhanced bus or modern streetcar
 - Not transit signal preemption, as on Hiawatha LRT
 - More reliable travel time





Faster Boarding

- Pay before boarding
 - "Proof of Payment" and fare inspection, like light rail
- Board through any door





Better Stop Amenities

- Sidewalk curb extended into parking lane
- Streetcar/bus stops in traffic lane
- Separates passenger waiting area and sidewalk walking area







Better Stop Amenities

Real-time information



Cleveland HealthLine



Kansas City MAX



At Mall of America Station



NEXT STEPS



Detailed Evaluation of Alternatives

- Primary Alternatives
 - "No-Build"
 - Modern Streetcar (9.2 miles)
 - Enhanced Bus (9.2 miles)
- Phased Implementation of Streetcar Alternative Likely
- Starter Streetcar Alternative
 - Initial concept: Lake St to East Hennepin Avenue (3½ miles)
 - May be refined





Information to Prepare for Evaluation

- Cost to build
- Number of people who would ride it
- Effects on the environment
- Effects on traffic flow
- Annual cost to operate and maintain
- Cost effectiveness (cost divided by riders)
- Ability to attract more housing and businesses/ jobs to the corridor
- Public and stakeholder sentiment



Feb 12-14 Public Open Houses

- Tuesday, February 12, 5:30 p.m. to 7:30 p.m. MPHA Parker Skyview Community Room, 1815 Central Avenue NE Presentation at 6 p.m.
- Wednesday, February 13, 5:30 p.m. to 7:30 p.m. HCMC Whittier Clinic, 2810 Nicollet Avenue S Presentation at 6 p.m.
- Thursday, February 14, 3:30 p.m. to 5:30 p.m. Minneapolis Central Library, 300 Nicollet Mall Presentation at 4 p.m.

